

REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested in view of the foregoing amendments and discussion presented herein.

1. **Rejection of Claims.**

(a) **35 U.S.C. §102.** Claims 1-7 were rejected under 35 U.S.C. §102(b) as being anticipated by Yue (U.S. No. 5,244,819). Claims 8-13 were rejected under 35 U.S.C. §102(e) as being anticipated by Okonogi (U.S. No. 6,323,109). Claims 14-19 were rejected under 35 U.S.C. 102(e) as being anticipated by Henley et al. (U.S. No. 6,083,324). Claims 20-26 were rejected under 35 U.S.C. §102(b) as being anticipated by Yonehara et al. (U.S. No. 5,493,394). Claims 29-36 and 38-43 were rejected under 35 U.S.C. §102(e) as being anticipated by Srikrishnan (U.S. No. 5,882,987). Claims 45-50, 51-56 and 58-62 were rejected under 35 U.S.C. §102(e) as being anticipated by Sato (U.S. No. 5,854,123). Claims 64-77 were rejected under 35 U.S.C. §102(e) as being anticipated by Matsui et al. (U.S. No. 6,191,007).

(b) **35 U.S.C. §103.** Claim 27 was rejected under 35 U.S.C. §103(a) as being unpatentable "overall as applied to claims 1, 8, 14, 20 or 26 as above" and further in view of Kosaki (U.S. No. 5,200,641). Claim 28 was rejected under 35 U.S.C. §103(a) as being unpatentable "overall as applied to claims 1, 8, 14, 20 or 26 as above" and further in view of Schelhorn (U.S. No. 4,383,280). Claims 37 and 44 were rejected under 35 U.S.C. §103(a) as being unpatentable over Srikrishnan "as applied to claims 36 and 38 above" and further in view of Matsui et al. Claims 51, 57 and 63 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sato et al. "as applied to claims 45 and 52 above" and further in view of Matsui et al. Claim 63 was rejected under 35 U.S.C. §103(a) as being unpatentable over Sato "as applied to claim 58 above" and further in view of Matsui et al. Claim 78 was rejected under 35 U.S.C. §103(a) "as being unpatentable over all as applied to claim 34, 35, 42, 43, 49, 50, 55,

56, 61, 62, 67, 68, 74 or 75 above" and further in view of Sparks (U.S. No. 5,719,069). Claim 79 was rejected under 35 U.S.C. §103(a) "as being unpatentable over all as applied to claim 34, 35, 42, 43, 49, 50, 55, 56, 61, 62, 67, 68, 74 or 75 above" and further in view of Young et al. (U.S. No. 4,350,537). Claim 80 was rejected under 35 U.S.C. §103 "as being unpatentable over all as applied to claim 29, 38, 45, 52, 58, 64 or 70 above" and further in view of Riesman et al. (U.S. No. 5,168,078).

In response, the Applicant notes the following:

1. The Applicant appreciates and thanks the Examiner for the thorough examination of the pending claims.
2. This application claims priority dating back to December 31, 1998 and, therefore, a number of the references cited by the Examiner are not prior art as against this application.
3. Further, with regard to the references cited by the Examiner, the Applicant has amended each of the independent claims to recite one or more features of the invention which are not taught or fairly suggested by the cited references, whether the cited references are viewed singly or in combination.

More particularly, the claims now specify a substrate which is adapted for diffusing hydrogen from the bottom of the substrate and collecting it in a collection region which is away from the bottom and toward the top of the substrate to which the active device layer would be attached. In the apparatus and method recited in the Applicant's claims, the hydrogen is diffused from a position that is essentially opposite the active device layer, as opposed to the implantation at the top of the structure and through the active device layer.

It is significant that the Applicant's apparatus and method employs a substrate where hydrogen is diffused from the bottom of the substrate toward the top, instead of in the reverse direction. In contrast, the cited references ion implant a substance, sometimes hydrogen, into the top surface of the substrate and other structures or

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device layer they describe. In the Applicant's invention, the hydrogen is diffused from the bottom surface to avoid the radiation damage that would be produced by ion implanting from the top surface as is described in the cited references, particularly the references that describe conventional "ion cut" processes used to fabricate SOI. The Applicant's approach is not taught or fairly suggested by the cited references as properly applied.

Accordingly, Claims 1-80 are in a condition for allowance and the rejection should be withdrawn.

2. Amendments Made Without Prejudice or Estoppel.

Notwithstanding the amendments made and accompanying remarks provided above, the Applicant has made these amendments in order expedite allowance of the currently pending subject matter. However, the Applicant does not acquiesce in the original ground for rejection with respect to the original form of these claims. These amendments have been made without any prejudice, waiver, or estoppel, and without forfeiture or dedication to the public, with respect to the original subject matter of the claims as originally filed or in their form immediately preceding these amendments. The Applicant reserves the right to pursue the original scope of these claims in the future, such as through continuation practice, for example.

3. Conclusion.

Based on the foregoing, Applicants respectfully request that the various grounds for rejection in the Office Action be reconsidered and withdrawn with respect to the presently amended form of the claims, and that a Notice of Allowance be issued for the present Application to pass to issuance.

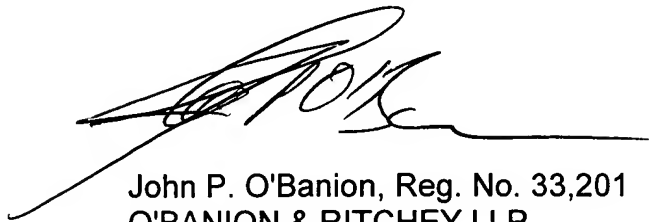
In the event any further matters remain at issue with respect to the present application, Applicants respectfully request that the Examiner please contact the undersigned below at the telephone number indicated in order to discuss such matter

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prior to the next action on the merits of this application.

Date: 7/14/06

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'J. O'Banion', written over a horizontal line.

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